

## **METHOD FOR AUTHENTICATING DUAL-MODE ACCESS TERMINALS**

### **ABSTRACT OF THE DISCLOSURE**

5       A method is provided for operating a dual-mode access terminal such that a CAVE  
based authentication process may be used in both an IS-2000 and an HRPD mode of  
operation. Generally, the access terminal receives a CHAP challenge from an access  
network, and then derives a RAND challenge based on at least a portion of the CHAP  
challenge. The CAVE based authentication process is then performed using the RAND  
10 challenge to produce a SMEKEY and a PLCM. Thereafter a secret CHAP key is derived  
from the SMEKEY and PLCM and provided to the access network for purposes of  
authenticating the access terminal in the HRPD mode of operation.